

Package ‘forge’

May 30, 2026

Type Package

Title Casting Values into Shape

Version 0.2.1

Description Helper functions with a consistent interface to coerce and verify the types and shapes of values for input checking.

License Apache License (>= 2.0)

Encoding UTF-8

Depends R (>= 3.1.2)

Imports rlang (>= 0.3.1), magrittr

Suggests testthat, covr

Config/roxygen2/version 8.0.0

URL <https://github.com/rstudio/forge>

BugReports <https://github.com/rstudio/forge/issues>

NeedsCompilation no

Author Kevin Kuo [aut] (ORCID: <<https://orcid.org/0000-0001-7803-7901>>),
Tomasz Kalinowski [cre]

Maintainer Tomasz Kalinowski <tomasz@posit.co>

Repository CRAN

Date/Publication 2026-05-30 05:13:07 UTC

Contents

cast	2
certify	7
Index	8

`cast`*Cast values into shape*

Description

These functions verify and attempt to coerce values into the specified types and shapes. If they are unsuccessful in the coercion, an error is thrown.

Usage

```
cast_integer(  
  x,  
  n = NULL,  
  allow_na = FALSE,  
  allow_null = FALSE,  
  id = NULL,  
  return_id = FALSE  
)
```

```
cast_scalar_integer(  
  x,  
  allow_na = FALSE,  
  allow_null = FALSE,  
  id = NULL,  
  return_id = FALSE  
)
```

```
cast_nullable_integer(  
  x,  
  n = NULL,  
  allow_na = FALSE,  
  id = NULL,  
  return_id = FALSE  
)
```

```
cast_nullable_scalar_integer(x, allow_na = FALSE, id = NULL, return_id = FALSE)
```

```
cast_integer_list(  
  x,  
  n = NULL,  
  allow_na = FALSE,  
  allow_null = FALSE,  
  id = NULL,  
  return_id = FALSE  
)
```

```
cast_nullable_integer_list(  
  x,  
  n = NULL,  
  allow_na = FALSE,  
  allow_null = FALSE,  
  id = NULL,  
  return_id = FALSE  
)
```

```
x,  
n = NULL,  
allow_na = FALSE,  
id = NULL,  
return_id = FALSE  
)
```

```
cast_double(  
x,  
n = NULL,  
allow_na = FALSE,  
allow_null = FALSE,  
id = NULL,  
return_id = FALSE  
)
```

```
cast_scalar_double(  
x,  
allow_na = FALSE,  
allow_null = FALSE,  
id = NULL,  
return_id = FALSE  
)
```

```
cast_nullable_double(  
x,  
n = NULL,  
allow_na = FALSE,  
id = NULL,  
return_id = FALSE  
)
```

```
cast_nullable_scalar_double(x, allow_na = FALSE, id = NULL, return_id = FALSE)
```

```
cast_double_list(  
x,  
n = NULL,  
allow_na = FALSE,  
allow_null = FALSE,  
id = NULL,  
return_id = FALSE  
)
```

```
cast_nullable_double_list(  
x,  
n = NULL,  
allow_na = FALSE,  
id = NULL,
```

```
    return_id = FALSE
  )

cast_character(
  x,
  n = NULL,
  allow_na = FALSE,
  allow_null = FALSE,
  id = NULL,
  return_id = FALSE
)

cast_scalar_character(
  x,
  allow_na = FALSE,
  allow_null = FALSE,
  id = NULL,
  return_id = FALSE
)

cast_nullable_character(
  x,
  n = NULL,
  allow_na = FALSE,
  id = NULL,
  return_id = FALSE
)

cast_nullable_scalar_character(
  x,
  allow_na = FALSE,
  id = NULL,
  return_id = FALSE
)

cast_character_list(
  x,
  n = NULL,
  allow_na = FALSE,
  allow_null = FALSE,
  id = NULL,
  return_id = FALSE
)

cast_nullable_character_list(
  x,
  n = NULL,
  allow_na = FALSE,
```

```
    id = NULL,  
    return_id = FALSE  
  )
```

```
cast_string(  
  x,  
  allow_na = FALSE,  
  allow_null = FALSE,  
  id = NULL,  
  return_id = FALSE  
)
```

```
cast_nullable_string(x, allow_na = FALSE, id = NULL, return_id = FALSE)
```

```
cast_string_list(  
  x,  
  n = NULL,  
  allow_na = FALSE,  
  allow_null = FALSE,  
  id = NULL,  
  return_id = FALSE  
)
```

```
cast_nullable_string_list(  
  x,  
  n = NULL,  
  allow_na = FALSE,  
  id = NULL,  
  return_id = FALSE  
)
```

```
cast_logical(  
  x,  
  n = NULL,  
  allow_na = FALSE,  
  allow_null = FALSE,  
  id = NULL,  
  return_id = FALSE  
)
```

```
cast_scalar_logical(  
  x,  
  allow_na = FALSE,  
  allow_null = FALSE,  
  id = NULL,  
  return_id = FALSE  
)
```

```
cast_nullable_logical(  
  x,  
  n = NULL,  
  allow_na = FALSE,  
  id = NULL,  
  return_id = FALSE  
)  
  
cast_nullable_scalar_logical(x, allow_na = FALSE, id = NULL, return_id = FALSE)  
  
cast_logical_list(  
  x,  
  n = NULL,  
  allow_na = FALSE,  
  allow_null = FALSE,  
  id = NULL,  
  return_id = FALSE  
)  
  
cast_nullable_logical_list(  
  x,  
  n = NULL,  
  allow_na = FALSE,  
  id = NULL,  
  return_id = FALSE  
)  
  
cast_choice(  
  x,  
  choices,  
  allow_na = FALSE,  
  allow_null = FALSE,  
  id = NULL,  
  return_id = FALSE  
)
```

Arguments

x	A vector.
n	The required length of the vector. If NULL, the length is not checked.
allow_na	Whether to allow NAs in the vector.
allow_null	Whether to allow NULL.
id	Name given to the input to aid the user in identifying the bad value.
return_id	Whether to return the ID as an attribute. This should only be set to TRUE when piping the result to another forge function. Defaults to FALSE.
choices	A character, numeric, or integer vector of allowed values.

Examples

```
# Cast a double vector to integer
cast_integer(c(1, 2))

# Cast a numeric to a string
cast_string(4.5)

# Cast an integer vector to a list of doubles
cast_double_list(1:4)
```

certify	<i>Ensure Conditions on a Value</i>
---------	-------------------------------------

Description

Checks that the input value satisfies specified conditions

Usage

```
certify(x, ..., allow_null = FALSE, id = NULL, return_id = FALSE)

gt(l)

gte(l)

lt(u)

lte(u)

bounded(l = NULL, u = NULL, incl_lower = TRUE, incl_upper = TRUE)
```

Arguments

x	The value to be checked.
...	Conditions to be checked; should be functions that return TRUE/FALSE.
allow_null	Whether to allow null input.
id	Name given to the input to aid the user in identifying the bad value.
return_id	Whether to return the ID as an attribute. This should only be set to TRUE when piping the result to another forge function. Defaults to FALSE.
l	Lower bound for the inequality condition.
u	Upper bound for the inequality condition.
incl_lower	Whether to include the left endpoint.
incl_upper	Whether to include the right endpoint.

Index

bounded (certify), 7

cast, 2

cast_character (cast), 2

cast_character_list (cast), 2

cast_choice (cast), 2

cast_double (cast), 2

cast_double_list (cast), 2

cast_integer (cast), 2

cast_integer_list (cast), 2

cast_logical (cast), 2

cast_logical_list (cast), 2

cast_nullable_character (cast), 2

cast_nullable_character_list (cast), 2

cast_nullable_double (cast), 2

cast_nullable_double_list (cast), 2

cast_nullable_integer (cast), 2

cast_nullable_integer_list (cast), 2

cast_nullable_logical (cast), 2

cast_nullable_logical_list (cast), 2

cast_nullable_scalar_character (cast), 2

cast_nullable_scalar_double (cast), 2

cast_nullable_scalar_integer (cast), 2

cast_nullable_scalar_logical (cast), 2

cast_nullable_string (cast), 2

cast_nullable_string_list (cast), 2

cast_scalar_character (cast), 2

cast_scalar_double (cast), 2

cast_scalar_integer (cast), 2

cast_scalar_logical (cast), 2

cast_string (cast), 2

cast_string_list (cast), 2

certify, 7

gt (certify), 7

gte (certify), 7

lt (certify), 7

lte (certify), 7